

IN THE CLAIMS:

Please amend the claims as shown below. The status of the claims after amendment will be as follows:

9. (previously presented) A wave soldering tank comprising a soldering tank body for housing molten solder, a solder feed chamber disposed within the soldering tank body and having an inlet disposed below the level of molten solder and an outlet disposed above the level of molten solder in the soldering tank body, and a multiple-blade screw-type pump disposed in the inlet so as to draw molten solder into the solder feed chamber through the inlet and discharge molten solder through the outlet.

10. (previously presented) A wave soldering tank as claimed in claim 9, wherein the pump includes an impeller comprising a rotatable hub and a plurality of helical blades secured to the hub at equal intervals in the circumferential direction of the hub.

11. (previously presented) A wave soldering tank as claimed in claim 10, wherein each of the blades overlaps an adjoining one of the blades when the blades are viewed in the axial direction of the impeller.

12. (previously presented) A wave soldering tank as claimed in claim 11 wherein the impeller comprises four helical

blades provided at equal intervals in the circumferential direction of the hub, each blade extending around the hub by at least 120° between first and second ends of the blade.

13. (previously presented) A wave soldering tank as claimed in claim 10 wherein each of the blades is sloped by at most 45° with respect to a plane perpendicular to a rotational axis of the hub.

14. (previously presented) A wave soldering tank as claimed in claim 9 wherein the solder feed chamber comprises a partition which divides the interior of the soldering tank body into an upper and lower portion, the inlet comprises an opening formed in the partition, and the pump includes an impeller and a cylindrical casing disposed in the inlet and surrounding the impeller, the impeller being rotatably disposed in the casing so as to transport molten solder in an axial direction of the casing.

15. (previously presented) A wave soldering tank as claimed in claim 14 wherein the solder feed chamber includes a duct which extends upwards from the partition and a nozzle disposed at an upper end of the duct and extending above the surface of molten solder in the soldering tank body.

16. (previously presented) A wave soldering tank as claimed in claim 14 wherein a lower end of the impeller extends 5

- 10 mm below a lower end of the casing.

17. (previously presented) A wave soldering tank as claimed in claim 14 wherein a clearance between the casing and the impeller is 0.1 - 1 mm.

18. (new) A wave soldering tank as claimed in claim 9 wherein the pump has at least 3 helical blades and each of the blades overlaps an adjoining one of the blades when the blades are viewed in the axial direction of the pump.

19. (new) A wave soldering tank as claimed in claim 9 wherein the pump has at least 4 helical blades and each of the blades overlaps an adjoining one of the blades when the blades are viewed in the axial direction of the pump.

20. (new) A wave soldering tank comprising a soldering tank body for housing molten solder, a horizontal partition extending across the tank body below the level of molten solder in the tank body, the partition having first and second openings horizontally spaced from each other, a bowl-shaped guide secured to a lower side of the partition and having curved surfaces for guiding fluid beneath the first and second openings, a nozzle having a lower end in fluid communication with the second opening in the partition and an upper end disposed above the level of molten solder in the tank body, and a multiple-blade screw-type pump having a multiple-blade screw-type pump having an impeller

disposed so as to draw molten solder downwards through the first opening into a space between the partition and the bowl-shaped guide.

21. (new) A wave soldering tank as claimed in claim 20 wherein the impeller is disposed in the first opening of the partition.

22. (new) A wave soldering tank as claimed in claim 20 wherein the impeller includes at least four helical blades.

23. (new) A wave soldering tank as claimed in claim 20 including a duct extending upwards from the partition above the second opening and communicating between the second opening and the lower end of the nozzle.

24. (new) A wave soldering tank as claimed in claim 23 wherein there are no obstructions to flow of fluid between the first opening and the lower end of the nozzle.

25. (new) A wave soldering tank comprising a soldering tank body for housing molten solder, a nozzle having an upper end disposed above a level of molten solder in the tank body and a lower end, a screw-type pump having an impeller with at least 4 helical blades disposed in the tank body below the level of molten solder in the tank body, each of the blades overlapping an adjoining one of the blades when the blades are viewed in an

axial direction of the impeller, and a casing surrounding the impeller and fluidly communicating with the lower end of the nozzle along an unobstructed flow path.